

# the Milliwatt



The award-winning monthly publication of  
The Baltimore Radio Amateur Television Society  
P.O. Box 5915      Baltimore, MD 21282-5915

October, 2004

## MILLIWATT TO BE AVAILABLE ON BRATS HOME PAGE

Starting with the next issue, you will be able to read your *MILLIWATT* on The BRATS home page. Simply go to: <http://www.bratsatv.org> and click on *MILLIWATT*. Trial runs are under way right now. If you no longer wish to receive a hard copy, please let me know and we will take your name off the mailing list.

## BRATS DUES TO INCREASE JANUARY 1

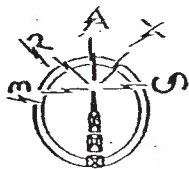
### Renew Now and Save!

On September 14, The Board of Directors voted to increase the dues as follows: Regular member: \$15; Retired/Disabled/Student: \$10; Family membership (includes all members of the same family who are hams) \$20. The increase is effective January 1, 2005. No one present could remember when the previous increase (if any) took place. Chances are that the dues have always been at the previous rate. There has been no increase in thirty years! As you note above, The Milliwatt will soon be available from our homepage, but there will be no discount for choosing to obtain it that way. Increasing administrative costs necessitated the dues increase, but we remain "the cheapest guys in town". Renew before January 1 and save. Thank you for your continued support.

## REPEATER COORDINATOR OKAYS MANDATORY REPEATER TONE POLICY

The Southeast Repeater Association (SERA) Board of Directors has approved an "all tone, all the time" policy for the repeaters SERA coordinates. SERA provides voluntary frequency coordination for amateur repeaters in Georgia, South Carolina, North Carolina, Kentucky, Tennessee, Mississippi and parts of Virginia and West Virginia. The Board okayed a motion to amend its coordination policy and guidelines to require CTCSS or DCS receive and transmit tones on all new FM voice repeaters. Existing voice repeaters will have until July 1, 2006, to comply. The SERA Repeater Journal reported the move in its August issue. Repeater Journal Editor Gary Pearce, KN4AQ, said a need to relieve interference complaints led to the Board's decision.

"The point is to stop the ongoing complaints and skirmishes between co-channel neighbors running carrier-access repeaters," Pearce explained. "The vote was unanimous, but SERA recognizes that tone isn't universally popular nor is it a cure-all. And it causes new problems, particularly for travelers." SERA has no plans to automatically de-coordinate repeaters that continue to operate without tones, but "SERA would not entertain an interference complaint from the owner of any repeater who chooses to remain carrier access," the Repeater Journal said. If a carrier-access repeater owner getting co-channel interference complains to the FCC, SERA would tell the Commission that the complaining repeater's owner was opting to operate outside the conditions of coordination. "SERA would expect that to be interpreted as a 'no,'" the Repeater Journal report said. "If a repeater owner wants to complain about interference, they'll have to incorporate tone first," Pearce said.



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The award-winning monthly publication of The BRATS. Items contained herein may be reprinted with credit.

Mayer D. Zimmerman, W3GXX, Editor

## Some Thoughts

It is interesting to note that our friends to the south have instituted a mandatory requirement for "all tone, all the time" on their repeaters. CTSS or DCS will be required to transmit on all SERA-coordinated repeaters. This was done to alleviate interference. I would hope we don't do it here. Despite the very low cost of radios today (You can get an ICOM walkie with tone scan, LCD readout, 5 watts on transmit, a hundred memories, etc. for \$114 brand new), there are some youngsters and some seniors on fixed income that cannot bear the expense of a new rig. Requiring a tone to access a repeater is not the only way to alleviate interference. There are other ways. Let's not get carried away! 73, Mayer, W3GXX

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**The Baltimore Radio Amateur TV Society, Inc.**  
**P.O. Box 5915 Baltimore, MD 21282-5915**

a non-profit organization under section 501(c)(3) of the Internal Revenue Code and a non-profit corporation in the State of Maryland.

**home page:** <http://www.bratsatv.org>

**e-mail:** [mail@bratsatv.org](mailto:mail@bratsatv.org)

**InfoLine:** 410- 461-0086

**Meetings:** 2nd Tuesday, 7:30 PM, Pikesville Library,  
1301 Reisterstown Rd., Pikesville, MD.

**President:** Ed Rosen, N3GXH

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## BRATS Repeaters

BRATS Linked Repeater System

W3DID 147.03+, 224.96-, 448.325-

BRATS Stand-Alone Repeater

443.35-

BRATS Packet Network Nodes

W3GXT-5 145.05

W3GXT-10 224.52

BRATS ATV Repeater System

W3WCQ, Inputs: 426.25, 1253.25

Outputs: 439.25, 911.25

## BRATS WEEKLY NETS

Mon. 11:45 Informal ATV Net, W3WVV

Mon. 9 PM Traffic & Info Net, W3GXX

Tue. 9 PM Horsetraders Net, KA3CEA

Thu 9 PM BRATS ATV Net

Sat. 1 PM. News Bulletin, W3GXX

Sat. 1:20 BRATS Answer Men  
W3WVV, N3GXH

As Needed: Weather/Emergency Net,  
Skywarn Net, WA3DZZ, N3VMF

## BRATS Board of Directors

Through December, 2004

KA3RRK, N3WJH, N3SOK, KC3FI

Through December, 2005

KA3IDB, W3ZQI, K3RGG, KD7QOT,  
KB3FIF

## BRATS MEETINGS

Second Tuesday, 7:30 PM

Pikesville Library

1301 Reisterstown Road

## Next BRATS Meeting

Tuesday, October 12, 7:30 PM

at the Pikesville Library

1301 Reisterstown Road

## DUES after January 1, 2005:

Regular Membership: \$15

Retired/Disabled/Student: \$10

Entire Family of hams: \$20

**Renew NOW and save!**

## **Cayman Islands emergency traffic exempt from third-party traffic rules,**

Because of changes to the international Radio Regulations at World Administrative Conference 2003, the FCC will not enforce third-party traffic rules contained in §97.115 of the FCC Amateur Radio Service rules for the passage of emergency and health-and-welfare traffic. The FCC continues to evaluate necessary revisions to the wording of Part 97 to reflect the WARC-03 changes, but Commission staff has assured ARRL that it will not sanction amateurs passing appropriate emergency-related traffic with stations in the Cayman Islands, with which the US has no third-party traffic agreement.

## **QCWA-suffix call sign to mark convention special event**

Industry Canada has authorized Quarter Century Wireless Association (QCWA) National Capital Chapter 70 to use the special event call sign VE3QCWA from September 17 until October 17 in recognition of the QCWA International Convention October 15-17 in Ottawa. National Capital Chapter 70 is hosting the event, which is open to all radio amateurs. QSLs for VE3QCWA go to Jim Dean, VE3IQ.

## **FCC SPECTRUM POLICY TASK FORCE ANNOUNCES INTERNET DATABASE TO TRACK COMMISSION SPECTRUM PROCEEDINGS**

Washington, D.C. - The Federal Communications Commission's Spectrum Policy Task Force (SPTF) has launched a new Internet tracking tool to access information on FCC spectrum-related proceedings. The Internet tracking tool is part of the Task Force's efforts to improve access to information on the Commission's ongoing spectrum-related proceedings and initiatives. The listing is intended to provide the public, industry researchers and other interested parties one place on the FCC's website where these proceedings and initiatives are listed, with one- or two-click access to public comments, Commission documents and other related materials. To access the tracking tool, go to the link on the Task Force's homepage at <http://www.fcc.gov/sptf/> and click on the "Proceedings & Initiatives" hyperlink. Currently, 30 ongoing proceedings are listed.

## **FCC Still Enforcing Part 15 Rules in Some Amateur Interference Cases**

While the ARRL has accused the FCC of sweeping under the rug several Amateur Radio complaints of interference from unlicensed broadband over power line (BPL) devices, the Commission apparently is not ignoring other Part 15-related interference complaints from hams. With the assistance of the ARRL Laboratory, the FCC continues to dog complaints--some now longstanding--of power-line noise interference to Amateur Radio communication. Other cases of Part 15 device interference to radio amateurs have been a bit more exotic. For example, two recent citations issued by the Portland, Oregon, FCC field office involved interference from wireless microphones operating in the 70-cm band.

## **New Orbital Debris Mitigation Rules Will Apply to Amateur Radio Satellites**

New FCC Amateur Radio space station rules will impose requirements to mitigate orbital debris. The FCC adopted a Second Report and Order (R&O) in IB Docket 02-54 on June 9. The new rules, appearing September 9 in the Federal Register, affect Parts 5 (Experimental Service), 25 (Satellite Communications) and 97 (Amateur Service) of the FCC's rules and regulations. In general, they require submission of an "orbital debris mitigation plan" to the FCC with each license application. AMSAT-NA--the Radio Amateur Satellite Corporation--had wanted Amateur Radio exempted from orbital debris mitigation rules more detailed than those the FCC had proposed in 2002 for Part 97. AMSAT-NA President Robin Haighton, VE3FRH, said the organization is discussing the implications of the R&O but has no formal position yet.

## **Travel Web sites agree to be accessible to blind**

In one of the first enforcement actions of the Americans with Disabilities Act on the Internet, two major travel services have agreed to make sites more accessible to the blind and visually impaired. Priceline.com and Ramada.com have agreed to changes that will allow users with "screen reader software" and other technology to navigate and listen to the text throughout their Web sites, according to New York Attorney General Eliot Spitzer. Although the software and other devices, including a vibrating mouse that lets the blind "feel" boxes and images on the computer screen, have been available for years, Web sites must have specific coding that allows the equipment to operate, Spitzer said. "This is a precedent-setting decision," said Carl Augusto, president and CEO of the American Foundation for the Blind. "We hope it's going to be influencing other companies throughout the United States so that the 10 million blind and visually impaired people can fully participate in our society at all levels." "It's the right thing to do, and it's good business," said Augusto, who is visually impaired. Spitzer's settlement follows investigations over the last two years to determine if Web sites conform to the federal act and state law that require all "places of public accommodation" and all "goods, services, facilities, privileges, advantages, or accommodations" be accessible to the disabled. Priceline.com has already made the Web site accessible for the visually disabled to get airline tickets, said the firm's spokesman, Brian Ek. By the end of the year, the entire travel site will be accessible, he said. Ek said the firm encourages other firms to do the same. He said the firm isn't releasing the cost of making the entire site accessible for the visually disabled, but said it won't be enough to reduce earnings. A spokesman for Ramada.com didn't immediately respond to a request for comment. "Accessible Web sites are the wave of the future and the right thing to do," Spitzer said. "We applaud these companies for taking responsible and proper steps to make their Web sites accessible to the blind and visually impaired. We urge all companies who have not done so to follow their lead." Ramada.com and Priceline.com, which face no charges and make no admissions of guilt, will pay the state \$40,000 and \$37,500 to cover the investigation's cost. Spitzer said both firms were cooperative.

## **Hotels let customers use Net to check in**

Radisson Hotels & Resorts this week starts allowing guests to check in via the Internet up to a week before arrival. The move, soon to be followed by Hilton Hotels, marks something of a second electronic wave in the hotel industry as chains adopt high-tech lures to attract wired business travelers. The first wave — the rush to install high-speed Internet in guest rooms — is nearly complete. Now, the industry is giving guests ways to use their electronic gadgetry to minimize waiting or to otherwise enrich their lodging experience. Now available or in the works: electronic, calorie-tabulating menus in hotel restaurants; Wi-Fi-enabled roaming check-in clerks; and recharging cradles in rooms for Apple iPod personal music players. In December, Hilton launches advance Web check-in at 2,216 hotels across all brands, including Doubletree, Embassy Suites, Hampton Inn and Hilton Garden Inn. If all goes as planned, Radisson and Hilton guests who check in over the Web will be able to flash identification or a printout of their room confirmation at the front desk. They'll be handed a packet that includes a room key. Hilton guests, at larger hotels, will be able to get their keys at the self-service kiosks that are being installed. Radisson's "Express Yourself" Web check-in will be available to anyone who reserves a room. Seven days before arrival, customers will receive an e-mail inviting them to check in at Radisson.com. Hilton plans to make its online check-in available 24 hours before arrival.

## **More News That Sounds Like a Joke**

British surfboard designer Jools Matthews, working with Intel Corp., built an Internet-ready surfboard with an 80-gigabyte, wireless laptop, powered by solar panels and housing a video camera, for exhibition in June in Devon, England. The waterproofed circuitry adds about 5 pounds to the 9-foot-long board and is carefully placed so as to retain surfers' balance points.



## Wi-Fi in the sky

NEW YORK (Reuters) — Business travelers will be able to surf the Web securely on long-distance flights by combining services from Boeing Co. and iPass Inc., the companies plan to announce on Monday. Redwood Shores, California-based iPass, which makes software that connects travelers to their offices from remote locations, said corporate customers will be able to connect to the Web on planes within six months using wireless links from Boeing. The companies are betting that business travelers, who already connect their laptop computers wirelessly in hotels, cafes and airports around the world, want to stay connected on the plane. The market for airborne Internet has been slow to develop. Northern Sky Research predicts that it could grow to between \$200 million to \$300 million by 2008 from roughly \$5 million to \$10 million this year. So far Boeing only provides Internet links on a few long-haul routes for German carrier Lufthansa's but it said seven airlines have plans to outfit their planes. The aerospace company recently signed up Germany's Siemens AG as its first large corporate client. Boeing sets up so-called wireless hotspots in the sky by using satellites to deliver the Internet to planes and extending these links to passengers' laptops via Wi-Fi, or short-range wireless links which work on most laptops. Customers of iPass will not need to sign for a separate service to use the Boeing links. iPass hasn't finalized how much it plans to charge for the on-board service.

## Asiana Airlines Selects Connexion by Boeing for In-Flight Connectivity

SEOUL, South Korea, Asiana Airlines, one of the newest members of the Star Alliance, has selected Connexion by Boeing -- a business unit of The Boeing Company (NYSE: BA - News) -- as its provider of high-speed Internet-based communications onboard its long-haul fleet. The letter of intent agreement calls for the first installation of the Connexion by Boeing(SM) mobile connectivity service to commence in production on Asiana's 777-200ER airplane targeted for delivery in July 2005, with service starting shortly after that. Financial terms of the agreement were not disclosed.

## Airbus looking at ways to allow use of mobile phones on aircraft

FRANKFURT, Germany (AFP) — European aircraft maker Airbus said Thursday it is collaborating with the German aerospace centre DLR, to try and come up with a system which would allow passengers to use their mobile phones in-flight without interfering with the plane's navigation systems. Airbus and DLR were "working very intensively" to try and develop such a system, spokesman David Voskuhl said. But he refused to confirm or deny a report in the Thursday edition of the Financial Times Deutschland which said the first tests would be carried out on Sept. 3. "That depends on the weather and a number of other factors," he said. By coming up with such a system, Airbus is trying to out-do arch rival Boeing which has come up with a system allowing high-speed Internet access on board its aircraft, enabling passengers to consult their e-mail and surf the Web in-flight.

## Onboard wardrobe malfunction?

If you think that your fellow passengers are exercising questionable judgement in picking out their onboard wardrobe, you're not alone. "Today, travelers step off the beach barely clothed, or out of the gym still sweating, and onto their planes," writes Keith L. Alexander, Business Class travel columnist for The Washington Post. "Ungroomed, unshowered passengers shamble aboard oblivious to any concern that they will be packed onto a crowded flight with scores of other people in close quarters for hours." To make his point, Alexander cites an incident last month in which American Airlines ejected a passenger and his girlfriend from one a flight for wearing an "indecent" t-shirt. American has rules that say it may "refuse to transport you" if you "have an offensive odor not caused by a disability or illness" or are "are clothed in a manner that would cause discomfort or offense to other passengers." Mirroring the feedback received by Today in the Sky, many of Alexander's readers cheered American's decision to eject the passengers with the "indecent" shirt.

# URI physics employee invents new antenna technology

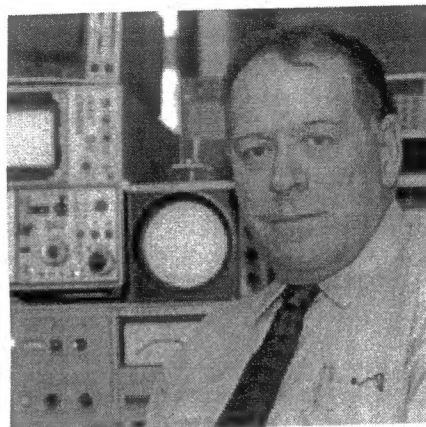
KINGSTON, R.I. — Rob Vincent, an employee in the University of Rhode Island's Physics Department, proves the adage that necessity is the mother of invention. An amateur radio operator since he was 14, Vincent has always lived in houses situated on small lots. Because he couldn't erect a large antenna on a confined property, he has been continually challenged over the years to find a way to get better reception. "I was always tinkering in the basement. Thank goodness, my parents were tolerant. I can still remember my poor father driving up our driveway after a hard day's work to see wires wrapped around the house," Vincent recalls.

"The Holy Grail of antenna technology is to create a small antenna with high efficiency and wide bandwidth," explains Vincent.

"According to current theory, you have to give up one of the three—size, efficiency, or bandwidth—to achieve the other two." After decades of experimentation, combined with a 30-year engineering career and Yankee ingenuity, Vincent has invented a revolutionary antenna technology. The distributed-load, monopole antennas are smaller, produce high efficiency, and retain good to excellent bandwidth. And they have multiple applications.

With this technology it will be possible to double, at minimum, the range of walkie-talkies used by police, fire, and other municipal personnel. Naval ships, baby monitors, and portable antennas for military use are other applications. An antenna could be mounted on a chip in a cell phone and be applied to wireless local area networks. Another application deals with radio frequency identification, which is expected someday to replace the barcode system. "It could even make the Dick Tracy wrist radio with all the features, such as Internet access, a possibility," Vincent says.

The inventor pursued his quest to build a better antenna in earnest eight years ago when he and his significant other moved into a house situated on a 50-foot by 100-foot lot in Warwick. There was nothing on the commercial market that could fit the lot that would provide the performance Vincent needed to be heard in distant lands and that would be acceptable to his neighbors. All the small antennas being sold were inefficient and lacked bandwidth, which resulted in low performance and high frustration. Vincent looked at the techniques that were currently used to reduce antenna size and realized something was missing in the way everyone was approaching the problem. He began to model various combinations into a computer program called MathCad. His first attempt produced a 21 MHz band antenna that was 18 inches high. Normally, antennas for this band are 12 to 24 feet high. Vincent installed the antenna in his back yard. The legal limit that amateurs can operate is 1,000 watts with the norm being 100 watts. The amateur radio operator experimented with 5 to 10 watts. He reached a station in Chile and made contacts in various European countries. Meanwhile he kept adding power until it reached 100 watts. That's when things suddenly went bad. Walking outside in the backyard, he understood why. The antenna had melted. After examining the molten matter, Vincent wasn't discouraged. This was only a small model and not designed to handle much power. The part of the antenna that failed proved to be the key to the design. After analyzing the failure, Vincent realized that he was able to transform a lot of current along the antenna with even relatively low power. "Antennas radiate by setting up large amounts of current flow through various parts of their structure," he says. "The larger the current the more radiation and the better the output of the antenna."



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Vincent went back to the drawing board and continued to improve the technology. Relying on his nearly 30 years at Raytheon Co. and at KVH Industries in Middletown R.I., which provided him with a diversified background in electronics and electronic systems, Vincent overcame a myriad of problems and succeeded. He established three test sites for various prototypes. Antennas were placed in Westport, Mass. in a salt marsh, the best ground for transmission and reception. Another set of antennas was placed on rocky ground in Cumberland, R.I., the worst kind of site, and at a Warwick site which is in between the two in terms of grounding. The antennas, which resemble flagpoles, worked well at all locations. Tests confirmed that Vincent has created antennas at one third to one ninth of their full size counterparts. Normally smaller antennas are only 8 to 15 percent efficient. Vincent's antennas achieved 80 to 100 percent efficiency as compared to the larger antennas. A patent is pending on Vincent's technology. The inventor has made the University of Rhode Island and its Physics Department partners that will benefit from any revenue his invention earns. "The University and its Physics Department has been very supportive and given me time and space to work on this project," says Vincent who was recently presented the 2004 Outstanding Intellectual Property Award by URI's Research Office. "I couldn't have done this without the University's support. It's only fair that it share in the profits."

**(Thanks to Bob, KC3FI, for sending us this article.: Rob is K1DFT)**

## **Finnair introduces text message check-in service**

In what it calls a first in international air travel, Finnair says it will let its frequent fliers check in using text messages on mobile phones. The program begins in October and is open to the airline's Finnair Plus cardholders. It will let those passengers who have only carry-on luggage go directly to the departure gate, bypassing ordinary check-in procedures. Like other passengers, they will have to go through a metal detector and security check. Once passengers have activated the service, they will automatically receive a check-in text message from Finnair before a flight with details, including the seat number. A passenger need only send a reply to confirm the seat assignment. The text message service will apply to all international flights leaving from Helsinki and Stockholm. Finnair said its check-in using SMS, or Short Message Service, is the first worldwide to work on all mobile phone models and all networks without charges. Other airlines offer similar services that notify passengers of flight delays, schedules or available seats.

## **Wrong-airport pilots axed:**

Northwest fired the pilots who mistakenly landed last June at Ellsworth Air Force Base in South Dakota instead of the Rapid City regional airport seven miles away. The carrier originally designated the pair "held from service" while the Federal Aviation Administration and company management investigated the incident. The fired pilots — whom neither their union nor management would identify — are taking the matter to grievance procedures, Will Holman, spokesman for the Northwest Air Line Pilots Association, told the The Associated Press. "We believe the punishment is excessive," he said. "Since the incident, charts and navigational databases have been modified to clearly show both." He said there "have been several previous instances" of pilot confusion between the base and the airport, but none involving Northwest pilots.

## **Leading Economic Indicators**

McDonald's franchisees in Cape Girardeau, Mo., Brainerd, Minn., and Norwood, Mass., recently began outsourcing their drive-thru order-taking to a call center in Colorado Springs, Colo. Thus, a Big Mac order shouted into a microphone in Missouri gets typed into a computer in Colorado (and a digital photograph of the customer's car is taken in order to reduce errors) and then clicked back to the originating restaurant's kitchen, which has the order ready in less time (30 seconds less, on average, with fewer errors) than the average McDonald's takes.

## **DXCC Desk accredits DX operation**

The following DX operation has been approved for DXCC credit: OJ0J, Market Reef, July 1-4, 2004.  
For more information, visit the DXCC Web page .

## **The following are the frequencies for AO-51:**

Analog Uplink:145.920 MHz FM (PL - 67Hz)  
1268.700 MHz FM (PL - 67Hz)  
Analog Downlink:435.300 MHz FM  
Digital Uplink:145.860 MHz 9600 bps, AX.25  
Digital Downlink:435.150 MHz 9600 bps, AX.25  
2401.200 MHz 38,400 bps, AX.25  
Broadcast Callsign:PACB-11  
BBS Callsign:PACB-12

## **"Intruder Signal" on 40 Meters Remains a Mystery for Now**

An unidentified signal that's been showing up on the 40-meter phone band on or about 7238 kHz has mystified amateurs in the western US and Canada, where it's been heard frequently for the past few weeks. Although it resembles a steady carrier, a closer inspection suggests that the intruding signal actually is a series of closely spaced signals. Don Moman, VE6JY, in Edmonton, Alberta, says he's been hearing the signal quite loud at his QTH.

## **Industry Canada soliciting comments on Morse requirement:**

Radio Amateurs of Canada (RAC) says Industry Canada (IC) is seeking comments from Canada's amateur community on recent RAC proposals dealing with Morse code as a qualification for Amateur Radio HF operation. RAC has proposed that IC delete the mandatory requirement for Morse testing but leave it as a voluntary qualification, since some countries retaining a Morse requirement may require Morse credit for reciprocal operation. The RAC recommends that Canadian amateurs endorse the proposal, Gazette Notice DGRB-003-04, Consultation on "Recommendations from Radio Amateurs of Canada to Industry Canada Concerning Morse Code and Related Matters," released August 28. Canadian amateurs have 60 days to comment.

## **2004 Space Symposium Registration Available**

AMSAT will hold it's 2004 Space Symposium and 35th Anniversary Celebration October 8-10, 2004 at the Crowne Plaza Hotel in Arlington VA. Agendas, information and registration forms for the 2004 Symposium are now available on the website. You can find more information in the Symposium section on AMSAT.ORG.

## **ARRL Gets Federal Grant to Tell Amateur Radio's Story to Communities**

The ARRL has received new funding of nearly \$90,000 from the Corporation for National & Community Service (CNCS) to execute a pilot program that will enlighten localities about the value of Amateur Radio to community safety and security. The one-year grant will enable ARRL to develop the Community Education Project (CEP) and carry ham radio's message to a dozen communities across the US. The CNCS also has renewed ARRL's Amateur Radio Emergency Communications course tuition reimbursement grant for a third--and final--year. The emergency training grant totals \$179,600. ARRL Chief Development Officer Mary Hobart, K1MMH, says the CEP will work with Citizen Corps--the League is a Citizen Corps affiliate--and ARRL personnel.

## **Echo telemetry software v1.0.5**

Version 1.0.5 of Tlm Echo is now available. Mike, KE4AZN reports that a telemetry time calculation bug that was fixed and some minor updates to the telemetry Screens are included. The latest Echo software is available from the Echo Project Page <http://www.amsat.org/amsat-new/echo/> thanks Mike, KE4AZN



## WA7BNM Contest Calendar

Sept. 25-26	CQ WW DX Contest, RTTY Scandinavian Activity, SSB Texas QSO Party Alabama QSO Party AGCW VHF/UHF Contest UBA ON Contest, 6 meters
Oct. 2-3	Oceania DX Contest, Phone EU Autumn Sprint, SSB California QSO Party
October 3	UBA On Contest, SSB RSGB 21/28 MHz Contest, SSB German Telegraphy Contest
Oct. 6-8	YLRL Anniversary Party, CW
October 7	SARL 80 meter QSO Party
Oct. 9-10	Pennsylvania QSO Party Makrothen RTTY Contest Oceania DX Contest, CW EU Autumn Sprint, CW
October 9	FISTS Fall Sprint
October 10	North American Sprint, RTTY 10-10 Day Sprint UBA ON Contest, CW
Oct 13-15	YLRL Anniversary Party, SSB
Oct 16-17	JARS WW RTTY Contest Worked All Germany Contest
October 17	Asia-Pacific Fall Sprint, CW UBA ON Contest, 2 meters RSGB 21/28 MHz Contest, CW
Oct 30-31	CQ WW DX Contest, SSB 10-10 Int'l Fall Contest, CW ARCI Fall QSO Party

## ARRL DX BULLETIN

**ANDORRA, C3.** Archie, C31BO has been QRV using RTTY on 20 meters from around 2130 to 2230z and then 40 meter CW around 2010z. QSL direct.

**SAUDI ARABIA, HZ.** Ahmed, HZ1AN is QRV each Friday on 20 meters SSB from around 0400 to 0700z. QSL Via DJ9ZB.

**WAKE ISLAND, KH9.** Terry is QRV as K7ASU/KH9 and has been active on 20 meters PSK31 around 0700z. QSL to home call.

**ASCENSION ISLAND, ZD8.** Ian, G8WVW is QRV as ZD8I until June 2006. He hopes to be active on 80 to 6 meters using SSB. QSL via G4LTI.

**continued next column**

**Renew NOW and save!**

## ARRL DX BULLETIN

**UGANDA, 5X.** Jay is QRV as 5X2A and has been active on 20 meters between 2100 and 2315z. QSL via K4ZLE.

**CAPE VERDE ISLANDS, D4.** Al, D44TT has been QRV on 15 meters around 1100z. QSL via K1BV.

**SEYCHELLES, S7.** Igor, S79OA has been QRV on 20 meters around 1700z. QSL via RN3OA.

**RODRIGUES ISLAND, 3B9.** Robert, 3B9FR has been QRV using RTTY on 20, 17 and 15 meters between 1400 to 1700z and after 0230z. QSL direct.

**BURUNDI, 9U.** Pierre, HB9DTM is licensed for six months as 9U6PM, and will soon be active from here. QSL to home call.

**UNITED ARAB EMIRATES, A6.** Abdullah, A61Q is usually QRV various times of the day on 80, 20, 17, 15, 12 and 10 meters using CW. QSL via EA7FTR.

**ST. VINCENT, J8.** Claude, J85M is usually QRV on 30 meters around 0200z. QSL direct.

**EGYPT, SU.** Alan, SU9BN is usually QRV on 30 meters around 0400 to 0430z. QSL via EA7FTR.

**CHAD, TT.** Francois, F6GYV, has received his TT8FT license and will be QRV for one year. His activity will be as time permits. QSL via operator's instructions.

**UZBEKISTAN, UK.** Rahqn, UK8OAH has been QRV on 160 meters from around 2100 to 2230z. QSL direct.

**NORFOLK ISLAND, VK9N.** Jim, VK9NS has been QRV on 30 meters around 0100z. QSL direct.

**TOKELAU ISLANDS, ZK3.** Atsu, 5W1SA is QRV as ZK3SA. Activity of late has been on 40 meters CW and 20 meters SSB. His length of stay is unknown. QSL via JH7OHF.

**MALAWI, 7Q.** Harry, G0JMU is QRV as 7Q7HB and plans to remain here until the end of November. QSL direct via G0IAS..

**ANTARCTICA.** Alexei, UA1PAC will be QRV as R1ANC while wintering at the Russian Base Vostok. He is responsible for running the ionospheric stations QSL via DL5EBE.

**CHAGOS ISLANDS, VQ9.** Larry, VQ9LA has been QRV on 80 meters around 1300z. QSL via operator's instructions.

**VANUATU, YJ.** Clark, YJ0XX has been QRV on 30 meters around 1000 to 1200z. QSL via W6YOO.

## Hamfests

**Saturday, Oct. 2:** W. Friendship, MD  
CARAFEST, Howard Co. Fairgrounds  
410-552-2652 **SATURDAY HAMFEST!**

**Sunday, October 17,** Sellersville, PA.  
RF Hill ARC Hamfest, Fire House,  
Main St. (Bethlehem Pike), Cathy,  
215-723-7294. Hamfest flyer with map:  
<http://www.rfhill.ampr.org>

**Sunday, October 31:** Westminster, MD  
CCARC Hamfest, Carroll Co. Agr. Ctr.  
Steve, N3SB, 410-876-1482. (145.41/R)  
<http://www.qsl.net/~k3pzn>

## VE Exams

**2<sup>nd</sup> Saturday, 1 PM:** Davidsonville, by AARC  
Register 12 Noon. Bob, AA3RR, 410-437-8193

**3<sup>rd</sup> Saturday, 9 AM:** Laurel by LARC, 384 Main  
St. John Creel, WB3GXW, 310-572-5124.

**4<sup>th</sup> Tuesday, 6 PM:** Linthicum, at Historical  
Electronics Museum; Harold, WB4OGP  
h) 410-757-0493; w) 410-712-6829.

## BARC VE EXAMS

12360 Owings Mills Blvd, Owings Mills.  
Register at 1 PM; Exams at 2 PM. Saturdays:  
Nov. 6, Dec. 4; Sunday, October 3<sup>rd</sup>.  
Pre-registration preferred, walk-ins permitted.  
Rusty, N3WKE, 410-247-0578.

## Stanley L. Burghardt, W0IT, SK

Stan Burghardt, W0IT (ex-W0BJV), of Watertown, South Dakota, died August 22. He was 93. He was the founder of Burghardt Radio Supply Inc (now Burghardt Amateur Center). Licensed in 1931 as W9BJV (which became W0BJV in 1946), Burghardt remained active on the air--especially on 6 meters--until his death. He also had been active in satellite work and was a member of ARRL, AMSAT and SMIRK. Burghardt started out selling ham radio parts in 1937 and in the 1950s expanded his Watertown operation into a popular Amateur Radio equipment supplier. The company has been a regular QST advertiser for the past 50 years, and many early ads featured a photo of Burghardt with his signature. Burghardt sold the business to Jim Smith, W0MJY, but he remained active in the company until January 2002. A service was held September 1.

**Renew NOW  
and save!**

**SILENT KEY**  
Walter C. Muth, K3KCP  
July 13, 2004

**October, 2004**

## milliwatt swap shop

**ads are free and get results!**

Send ad to: BRATS, P.O. Box 5915  
Baltimore, MD 21282-5915, or e-mail  
to: [mayerzimmerman@netzero.com](mailto:mayerzimmerman@netzero.com)

**FOR SALE:** The famous W3GXX low-band station. Confirmed over 250 Countries, WAS on 10, 15 and 20 meters! ICOM 730 xcvr. (fan needs some work), PS-15 power supply, MFJ 481 Grandmaster memory keyer, Bencher BY2 silver paddle, MFJ 900 Econo Tuner, Heath HM102 power/swr meter, Heath HD 1426 Field Strength meter. Heath 24-hour station clock. National NC-183 short wave receiver (with ham bands). Make me a reasonable offer (prefer package deal). Mayer, W3GXX. 410-786-6839 or e-mail [mayerzimmerman@netzero.com](mailto:mayerzimmerman@netzero.com)

**Also FOR SALE:** The famous W3GXX Antenna Farm. You take down. Some may already be sold: HyGain TH3MK3S (Stainless steel hardware) triband beam. Alliance HD-73 rotor, South River 10 foot tripod with some rust. (no extra charge for the rust), HyGain V2S 2 meter ground plane, HyGain 14 AVQ vertical for 10-40 meters (worked 4x4 on 40 meter CW with 50 watts), old coax. Contact Mayer, W3GXX as listed above. Thanks!

## AMSAT-VK HF Net.

2nd Sunday each month.  
November through March 0900 UTC 7.068 MHz  
April through October 1000 UTC 3.685 MHz

## HWN

Hurricane Watch Net:  
14.325 MHZ

## milliwatt swap shop

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Send ad to: BRATS, P.O. Box 5915  
Baltimore, MD 21282-5915, or e-mail  
to: [mayerzimmerman@netzero.com](mailto:mayerzimmerman@netzero.com)

**WANTED:** AC Gilbert erector sets; old, new  
large, small, need not be complete. CASH  
paid Lewis, 410-296-4874.

### Antique Radio Repair , Restoration

Eric, WA3TAD, Audio-Visual Service/Retro Radio  
3401 Chestnut Avenue; Baltimore, MD 21211.  
410-467-3620; [wa3tad@comcast.net](mailto:wa3tad@comcast.net)

**FREE!** I have a crank-up tower that goes up to  
40 ft. including ground mounting base. Free for  
anyone who could use it, but you transport. It is  
a steel triangle tubing type. If no one wants it,  
I plan to cut it up for scrap. John English AA3OW.  
[aa3ow@hotmail.com](mailto:aa3ow@hotmail.com)

**FOR SALE:** Yaesu low band transceiver,  
KW amplifier, misc. "stuff" to go w/ above.  
Make offer. Marvin, WB3JDR, 410-484-1404.

**FOR SALE:** ADI AR-146 2-mtr. mobile rig.  
Very dependable, includes mounting bracket,  
lighter plug adapter, magmount antenna, \$125.  
Yaesu FT50R dualband 2-mtr./440. Scans from  
76 MHz to 999 MHz (less cell). Extra battery,  
CA-15 charger, ear/throat mike, over shoulder  
harness, regularly \$330. Sell for \$275. Contact  
Russ for either or both rigs: [n3yi@yahoo.com](mailto:n3yi@yahoo.com)

### Radio Consignment Shop at Overlea Hobbies

8411 Harford Rd, Parkville, 410-665-3622.

Home of fine trains, model kits, x-acto, cars,  
planes, ships, many radios. Yaesu FT 101ZD,  
Kenwood TS-820S, 930S, Heath SB 102,  
National NC-183, more. Dick, N3JWN,  
410-488-2806.

**ATTENTION:** If you do **NOT** want your ad  
to run again, please send me an e-mail to  
that effect: [mayerzimmerman@netzero.com](mailto:mayerzimmerman@netzero.com)

### VTS – VIDEOTAPING SERVICE

Video/DVD duplications, video tape transferred  
to DVD. Once source up to 2 hours, \$30.  
Standards, conversions, Call VTS toll-free at  
**1-877-891-1002**. BRATS Member Bob Shapiro,  
K2MYS, <http://www.videotapingservice.com>

### JADE COMPUTERS, LLC

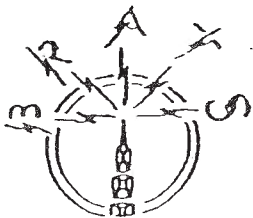
1009 Ingleside Ave, Baltimore, MD. 21228.  
Phone: 419-719-1246; FAX: 410-719-9494  
Your answer to custom built PC, office and  
home networking. Reseller for Net Integrity,  
server, cable modem, DSL, webpage design  
and hosting, POS and networking. We do  
CPR to your CPU. Kid tested, mother approved.  
Order PC on line: <http://www.jadecomputers.net>  
email: [joed@jadecomputers.us](mailto:joed@jadecomputers.us)

**FOR SALE:** Heathkit CO1015w/ inverter, \$75.  
Heathkit Security Sentinel GD-3810, \$20. AUTEK  
Research QF-1A SSB/CW/AM filter, \$40. D-104  
mic, G-stand, original boxes, \$45. Tektronix 604/  
716M X-Y scope, \$50. WWII HiPower ant. tuner,  
Vac. variables, roller inductor, \$120. Headphones  
AZDEN DM 10 , new in box, \$15, TELEX C-1320  
\$15. Clevite Bush, \$15. Panoramic adapter  
BC-1031C, \$45. Tektronix 105 square wave  
generator, \$25. Power supplies: 13.8VDC @ 20a.  
\$40; 13.8VDC @ 35a, \$50. Table mount rack  
cabinet, \$5. Complete UHF repeater system w/  
2 Motorola hand-helds, 1 mobile xcvr, \$150.  
W2IHY 8-band audio equalizer, noise gate, \$175.  
Kenwood TS930SAT, needs service \$150. Call  
Ted, W3OWN, 410-668-5580. Please leave  
message if you get answering machine.

**FOR SALE:** Two (2) BP-33 batteries for Kenwood  
TH-22AT . 6v.@ 1200mah nicads. John, KA3ZTC  
[ka3ztc1@juno.com](mailto:ka3ztc1@juno.com) or call me on the repeater.

**WANTED:** Ride to and from hamfests. Will  
contribute toward gasoline. I live in Baltimore City.  
Marv, N3BQA, 410-685-6308.

**YOUR AD** would have appeared in this  
space, if only you would have sent it to us:  
[mayerzimmerman@netzero.com](mailto:mayerzimmerman@netzero.com)



# the Milliwatt



The award-winning monthly publication of  
The Baltimore Radio Amateur Television Society  
P.O. Box 5915 Baltimore, MD 21282-5915

October, 2004

Renew NOW and save!

## BRATS Public Service

Saturday, October 16: Baltimore Marathon  
Contact Ian, N3CVA, 410-303-1412

## Next BRATS Meeting

Tuesday, October 12, 7:30 PM  
at the Pikesville Library  
1301 Reisterstown Road

## Extra Class Course

Historical Electronics Museum in Linthicum  
1745 W. Nursery Rd., Tuesday nights starting  
Sept. 21st, 6:30 PM. Must already have General  
or Advanced Class license. Contact Les, WR3X  
at 410-787-0341 or by e-mail: wr3x@juno.com,  
or Rol Anders, K3RA, 410-796-4792.

## ATV NETS

### BRATS Nets:

Monday, 11:45 AM, Informal ATV NET  
Thursday, 9 PM ATV Net, W3WVV

### Alternate Net:

Wednesday, 9 PM : Alternate ATV Net,  
Rotating Net Control (Audio 147.495)

### Low Band Net, AATN Meeting:

Fridays, 9 PM 3930 KHz, +/-

### Homepages:

BRATS: <http://www.bratsatv.org>

HATS: (Houston ATV Society):

<http://www.hats.stevens.com>

Black Mountain ATV Repeater:

<http://www.w6yx.stanford.edu>

## Other Radio Club Meetings:

### QCWA

Monday at Noon, Cactus Willie  
7315 Ritchie Hwy, Glen Burnie  
3<sup>rd</sup> Thursday, 1 PM: Old Country

Buffet, Joppa Rd at Satyr Hill

Last Wednes. 1 PM: Denny's

Bel Air Rd at Putty Hill

AARC: 1st and 3<sup>rd</sup> Thurs, 7:30 pm

Davidsonville Family Rec.Center,

Queen Anne Bridge Rd, Wayson

Rd. (147.105/R)

AMRAD: 2<sup>nd</sup> Thursday, 7:30 PM,

Dolley Madison Library; 1244 Oak

Ridge Ave. McLean, VA (147.21/R)

BARC: 1<sup>st</sup> and 3<sup>rd</sup> Wednesday, 7:30 PM

12360 Owings Mills Blvd. (nr. warehouse

Owings Mills, MD (146.67/R)

CARA: 4<sup>th</sup> Tuesday, Gateway Center,

Rm 401, 6751 Gateway Dr. Columbia.

South off Rte. 175 (147.135/R)

## BRATS MEETINGS

Second Tuesday, 7:30 PM  
Pikesville Library  
1301 Reisterstown Rd.

BRATS Membership Renewal: Regular= \$12; Retired/Disabled/Student/Fam.= \$6

Name \_\_\_\_\_

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City/State/Zip \_\_\_\_\_

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MAIL TO: BRATS; P.O. Box 5915, Baltimore, MD 21282. Thanks!